

REFERENCES

- Anandan, J.V. 2003. Parasitic diseases, In Dipiro, J.T., Taibert, R.I., Yee, G.C. (eds), *Pharmacotherapy: A Pathophysiologic approach*. McGraw-Hill, New York : 1967-1969.
- Angerhofer, C.K. and Pezzuto, J.M. 1992. Antimalarial activity of sesquiterpenes from the marine sponge *Acanthella klethra*. *J. Nat. Prod.* 55: 1787-1789.
- Alonso, D., Khalil, Z., Satkunanathan, N. and Livett, B.G. 2003. Drugs from the sea: Conotoxins as drug leads for neuropathic pain and other neurological conditions. *Mini-Rev. Med. Chem.* 3: 785-787.
- Barrero, A.F., Morel, J.F.Q., Herrador, M.M., Arteaga, J.F., Akssira, M., Benharref, A. and Dakir, M. 2005. Abietane diterpenes from the cones of *Cedrus atlantica*. *Phytochemistry.* 66: 105-111.
- Bourguet-Kondracki, M.L., Lacombe, F. and Guyot, M. 1999. Methanol adduct of puupehenone, a biologically active derivative from the marine sponge *Hyrtios* species. *J. Nat. Prod.* 62: 1304-1305.
- Chin, Y.W., Balunas, M.J., Chai, H.B. and Kinghorn, A.D. 2006. Drug discovery from natural sources. *AAPS. J.* 8: E239-E253.
- Chinworrungsee, M., Kittakoop, P., Isaka, M., Rungrid, A., Tanticharoen, M. and Thebtaranonth, Y. 2001. Antimalarial halorosellinic acid from the marine fungus *Halorosellinia oceanica*. *Bioorg. Med. Chem. Lett.* 11: 1965-1969.
- Christian, O.E., Henry, G.E., Jacob, H., McLean, S. and Reynolds, W.F. 2001. Prenylated benzophenone derivatives from *Clusia havetiodes* var. *stenocarpa*. *J. Nat. Prod.* 64: 23-25.
- Ciavatta, M.L., Fontana, A., Puliti, R., Scognamiglio, G. and Cimino, G. 1999. Structures and absolute stereochemistry of isocyanide and isothiocyanate amphilectenes from the Caribbean sponge *Cribochalina* sp. *Tetrahedron.* 55: 12629-12636.
- Ciavatta, M.L., Gavagnin, M., Manzo, E., Puliti, R., Mattia, C.A., Mazzarella, L., Cimino, G., Simpson, J.S. and Garson, M.J. 2005. Structural and stereochemical revision of isocyanide and isothiocyanate amphilectenes from the Caribbean marine sponge *Cribochalina* sp. *Tetrahedron.* 61: 8049-8053.

- Dembitsky, V.M. 2008. Bioactive peroxides as potential therapeutic agents. *Eur. J. Med. Chem.* 43: 223-251.
- Desjadins, R.E., Canfield, C.J., Haynes, J.D. and Chulay, J.D. 1979. Quantitative assessment of antimalarial activity in vitro by a semiautomated microdilution technique. *Antimicrob. Agents Chemother.* 16: 710-718.
- Donia, M. and Hamann, M.T. 2003. Marine natural products and their potential applications as anti-infective agents. *Lancet Infect. Dis.* 3: 335-348.
- El Sayed, K.A., Hamann, M.T., Hashish, N.E., Shier, W.T., Kelly, M. and Khan, A.A. 2001a. Antimalarial, antiviral and antitoxoplasmosis norsesiterterpene peroxide acids from the red sea sponge *Diacarnus erythraeanus*. *J. Nat. Prod.* 64: 522-524.
- El Sayed, K.A., Kelly, M., Kara, U.A.K., Ang, K.K.H., Katsuyama, I., Dunbar, D.C., Khan, A.A. and Hamann, M.T. 2001b. New manzamine alkaloids with potent activity against infectious diseases. *J. Am. Chem. Soc.* 123: 1804-1808.
- El Sayed, K.A., Yousaf, M., Hamann, M.T., Avery, M.A., Kelly, M. and Wipf, P. 2002. Microbial and chemical transformation studies of the bioactive marine sesquiterpenes (S)-(+)-curcuphenol and curcudiol isolated from a deep reef collection of the Jamaican sponge *Didiscus oxeata*. *J. Nat. Prod.* 65: 1547-1553.
- Etahiri, S., Bultei-Poncé, V., Caux, C. and Guyot, M. 2001. New bromoditerpenes from the red alga *Sphaerococcus eoronopifolius*. *J. Nat. Prod.* 64: 1024-1027.
- Fattorusso, E., Parapini, S., Campagnuolo, C., Basilico, N., Tagliatela-Scafati, O. and Taramelli, D. 2002. Activity against *Plasmodium falciparum* of cycloperoxide compounds obtained from the sponge *Plakortis simplex*. *J. Antimicrob. Chemother.* 50: 883-888.
- Gochfeld, D.J. and Hamann, M.T. 2001. Isolation and biological evaluation of filiformin, plakortide F, and plakortone G from the Caribbean sponge *Plakortis* sp. *J. Nat. Prod.* 64: 1477-1479.
- Goclik, E., König, G.M., Wright, A.D. and Kaminsky, R. 2000. Pelorol from the tropical marine sponge *Dactylospongia elegans*. *J. Nat. Prod.* 63: 1150-1152.

- Gunatilaka, A.A.L., Gopichand, Y., Schmitz, F.J. and Djerassi, C. 1981. Minor and trace sterols in marine invertebrates. 26. Isolation and structure elucidation of nine new 5 α ,8 α -epidioxy sterols from four marine organisms. *J. Org. Chem.* 46: 3860-3866.
- Hu, J.F., Gao, H.F., Kelly, M. and Hamann, M.T. 2001. Plakortides I-L, four new cyclic peroxides from an undescribed Jamaican sponge *Plakortis* sp. (Homosclerophorida, Plakinidae). *Tetrahedron.* 57: 9379-9383.
- Isaka, M., Suyarnsestakorn, C. and Tanticharoen, M. 2002. Aigialomycins A-E, new resorcylic macrolides from the marine mangrove fungus *Aigialus parvus*. *J. Org. Chem.* 67: 1561-1566.
- Iwashima, M., Terada, I., Iguchi, K. and Yamori, T. 2002. New biologically active marine sesquiterpenoid and steroid from the Okinawan sponge of the genus *Axinyssa*. *Chem. Pharm. Bull.* 50: 1286-1289.
- Jongrungruangchok, S., Kittakoop, P., Yongsmith, B., Bavovada, R., Tanasupawat, S., Lartpornmatulee, N. and Thebtaranonth, Y. 2004. Azaphilone pigments from a yellow mutant of the fungus *Monascus kaoliang*. *Phytochemistry.* 65: 2569-2575.
- Kirsch, G., König, G.M., Wright, A.D. and Kaminsky, R. 2000. A new bioactive sesterterpene and antiplasmodial alkaloids from the marine sponge *Hyrtios* cf. *erecta*. *J. Nat. Prod.* 63: 825-829.
- König, G.M. and Wright, A.D. 1996. Novel potent antimalarial diterpene isocyanates, isothiocyanates, and isonitriles from the tropical marine sponge *Cymbastela hooperi*. *J. Org. Chem.* 61: 3259-3267.
- König, G.M. and Wright, A.D. 1997. New and unusual sesquiterpenes: kelsoene, prespatane, epi- γ -gurjunene and T-cadinthiol from the tropical marine sponge *Cymbastela hooperi*. *J. Org. Chem.* 62: 3837-3840.
- König, G.M., Wright, A.D. and Liden, A. 1998. Antiplasmodial and cytotoxic metabolites from the Maltese sponge *Agelas oroides*. *Planta Med.* 64: 443-447.
- Kobori, M., Yoshida, M., Ohnishi-Kameyama, M., Takei, T. and Shinmoto, H. 2006. 5 α ,8 α -Epidioxy-22E-ergosta-6,9(11),22-trien-3 β -ol from an edible mushroom suppresses growth of HL60 leukemia and HT29 colon adenocarcinoma cells. *Biol. Pharm. Bull.* 29: 755-759.

- Krishna, S., Uhlemann, A.C. and Haynes, R. 2004. Artemisinins: Mechanisms of action and potential for resistance. *Drug Resist. Update.* 7: 233-244.
- Laurent, D. and Pietra, F. 2006. Antiplasmodial marine natural products in the perspective of current chemotherapy and prevention of malaria. A review. *Mar. Biol.* 8: 433-447.
- Laurent, D., Jullian, V., Parenty, A., Knibiehler, M., Dorin, D., Schmitt, S., Lozach, O., Lebouvier, N., Frostin, M., Alby, F., Maurel, S., Doerig, C., Meijer, L. and Sauvain, M. 2006. Antimalarial potential of xestoquinone, a protein kinase inhibitor isolated from a Vanuatu marine sponge *Xestospongia* sp. *Bioorg. Med. Chem.* 14: 4477-4482.
- Lazaro, J.E.H., Nitcheu, J., Mahmoudi, N., Ibana, J.A., Mangalindan, G.C., Black, G.P., Howard-ones, A.G., Moore, C.G., Thomas, D.A., Mazier, D., Ireland, C.M., Concepcion, G.P., Murphy, P.J. and Diquet, B. 2006. Antimalarial activity of crambescidin 800 and synthetic analogues against liver and blood stage of *Plasmodium* sp. *J. Antibiot.* 59: 583-590.
- Linington, R.G., González, J., Ureña, L.D., Romero, L.I., Ortega-Barría, E. and Gerwick, W.H. 2007. Venturamides A and B: Antimalarial constituents of the Panamanian marine cyanobacterium *Oscillatoria* sp. *J. Nat. Prod.* 70: 397-401.
- Marrero, J., Rodríguez, A.D., Baran, P., Raptis, R.G., Sánchez, J.A., Ortega-Barria, E. and Capson, T.L. 2004. Bielschowskysin, a gorgonian-derived biologically active diterpene with an unprecedented carbon skeleton. *Org. Lett.* 6: 1661-1664.
- Mayer, A.M.S. and Hamann, M.T. 2005. Marine pharmacology in 2001-2002: Marine compounds with anthelmintic, antibacterial, anticoagulant, antidiabetic, antifungal, anti-inflammatory, antimalarial, antiplatelet, antiprotozoal, antituberculosis and antiviral activities; affecting the cardiovascular, immune and nervous systems and other miscellaneous mechanisms of action. *Comp. Biochem. Physiol. C.* 140: 265-286.
- Mayer, A.M.S., Rodríguez, A.D., Berlinck, R.G.S. and Hamann, M.T. 2007. Marine pharmacology in 2003-4: Marine compounds with anthelmintic, antibacterial, anticoagulant, antifungal, anti-inflammatory, antimalarial, antiplatelet, antiprotozoal, antituberculosis and antiviral activities; affecting the cardiovascular, immune and nervous systems, and other miscellaneous mechanisms of action. *Comp. Biochem. Physiol. C.* 145: 553-581.

- McPhail, K.L., Correa, J., Linington, R.G., González, J., Ortega-Barria, E., Capson, T.L. and Gerwick, W.H. 2007. Antimalarial linear lipopeptides from a Panamanian strain of the marine cyanobacterium *Lyngbya majuscula*. *J. Nat. Prod.* 70: 984-988.
- Mitome, H., Shirato, N., Miyaoka, H., Yamada, Y. and Soest, R.W.M. 2004. Terpene isocyanides, isocyanates, and isothiocyanates from the Okinawan marine sponge *Stylissa* sp. *J. Nat. Prod.* 67: 833-837.
- Miyaoka, H., Shimomura, M., Kimura, H. and Yamada, Y. 1998. Antimalarial activity of kalihinol A and new relative diterpenoids from Okinawan sponge, *Acanthella* sp. *Tetrahedron.* 54: 13467-13474.
- Monaco, P., Parrilli, M., and Previtera, L. 1987. Two endoperoxide diterpenes from *Elodea canadensis*. *Tetrahedron Lett.* 28: 4609-4610.
- Murakami, N., Kawanishi, M., Itagaki, S., Horii, T. and Kobayashi, M. 2004. Synthesis of a bioprobe for elucidation of target molecule of spongean anti-malarial peroxides. *Bioorg. Med. Chem. Lett.* 14: 3513-3516.
- Nam, K.S., Jo, Y.S., Kim, Y.H., Hyun, J.W. and Kim, H.W. 2001. Cytotoxic activities of acetoxyscirpenediol and ergosterol peroxide from *Paecilomyces tenuipes*. *Life Sci.* 69: 229-237.
- Newman, D.J. and Cragg, G.M. 2004. Marine natural products and related compounds in clinical and advanced preclinical trials. *J. Nat. Prod.* 67: 1216-1238.
- Ospina, C.A., Rodríguez, A.D., Ortega-Barria, E. and Capson, T.L. 2003. Briarellins J-P and polyanthellin A: New eunicellin-based diterpenes from the gorgonian coral *Briareum polyanthes* and their antimalarial activity. 66: 357-363.
- Osterhage, C., Kaminsky, R., König, G.M. and Wright, A.D. 2000. Ascosalipyrrolidinone A, an antimicrobial alkaloid, from the obligate marine fungus *Ascochyta salicorniae*. *J. Org. Chem.* 65: 6412-6417.
- Osterhage, C., König, G.M., Höller, U. and Wright, A.D. 2002. Rare sesquiterpenes from the algicolous fungus *Drechslera dematioidea*. *J. Nat. Prod.* 65: 306-313.
- Papendorf, O., König, G.M. and Wright, A.D. 1998. Hierridin B and 2,4-dimethoxy-6-heptadecylphenol, secondary metabolites from the cyanobacterium *Phormidium ectocarpi* with antiplasmodial activity. *Phytochemistry.* 49: 2383-2386.

- Proksch, P., Edrada-Ebel, R.A. and Ebel, R. 2003. Drugs from the sea-opportunities and obstacles. *Mar. Drugs* 1: 5-17.
- Rao, K.V., Santarsiero, B.D., Mesecar, A.D., Schinazi, R.F., Tekwani, B.L. and Hamann, M.T. 2003. New manzamine alkaloids with activity against infectious and tropical parasitic diseases from an Indonesian sponge. *J. Nat. Prod.* 86: 823-828.
- Rao, K.V., Kasanah, N., Wahyuono, S., Tekwani, B.L., Schinazi, R.F. and Hamann, M.T. 2004. Three new manzamine alkaloids from a common Indonesian sponge and their activity against infectious and tropical parasitic diseases. *J. Nat. Prod.* 67: 1314-1318.
- Rao, K.V., Donia, M.S., Peng, J., Garcia-Palomero, E., Alonso, D., Martinez, A., Medina, M., Franzblau, S.G., Tekwani, B.L., Khan, S.I., Wahyuono, S., Willett, K.L. and Hamann, M.T. 2006. Manzamine B and E and ircinal A related alkaloids from an Indonesian *Acanthostrongylophora* sponge and their activity against infectious, tropical parasitic and alzheimer's diseases. *J. Nat. Prod.* 69: 1034-1040.
- Rathbun, R.C. 2000. Parasitic infections, In Herfindal, E.T. and Gourley, D.R. (eds) Textbook of therapeutics drug and disease management, 7th ed, Lippincott Williams and Wilkins, New York: 1631-1649.
- Rawat, D.S., Joshi, M.C., Joshi, P. and Atheaya, H. 2006. Marine peptides and related compounds in clinical trial. *Anti-cancer Agents Med. Chem.* 6: 33-40.
- Sheu, J.H., Chang, K.C. and Duh, C.Y. 2000. A cytotoxic 5 α ,8 α -epidioxysterol from a soft coral *Sinularia* species. *J. Nat. Prod.* 63: 149-151.
- Singh, C., Srivastav, N.C. and Puri, S.K. 2002. In vivo active antimalarial isonitriles. *Bioorg. Med. Chem. Lett.* 12: 2277-2279.
- Skehan, P., Storeng, R., Scudiero, D., Monks, A., McMahon, J., Vistica, D., Warren, J.T., Bokesch, H., Kenney, S. and Boyd, M.R. 1990. New colorimetric cytotoxicity assay for anticancer-drug screening. *J. Natl. Cancer Inst.* 82: 1107-1112.
- Trager, W. and Jensen, J.B. 1976. Human malaria parasites in continuous culture. *Science.* 193: 673-675.
- Wang, F., Fang, Y., Zhang, M., Lin, A., Zhu, T., Gu, Q. and Zhu, W. 2008. Six new ergosterols from the marine-derived fungus *Rhizopus* sp. *Steroids.* 73: 19-26.

- Wei, X., Rodríguez, A.D., Baran, P., Raptis, R.G., Sánchez, J.A., Ortega-Barria, E. and González, J. 2004. Antiplasmodial cembradiene diterpenoids from a southwestern Caribbean gorgonian octocoral of the genus *Eunicea*. *Tetrahedron*. 60: 11813-11819.
- World Health Organization. 2006. Guidelines for the treatment of malaria. WHO Press, Geneva: 16-66.
- World Health Organization. 2008. Available: http://www.rollbackmalaria.org/cmc_upload/0/000/015/372/RBMInfosheet_1.pdf. (Accessed; 2008, January, 15).
- World Health Organization and UNICEF. 2005. World malaria reported 2005. WHO Press, Geneva: 195-198.
- Wright, A.D. 2003. GC-MS and NMR analysis of *Phyllidiella pustulosa* and one of its dietary sources, the sponge *Phakellia carduus*. *Comp. Biochem. Physiol. A*. 134: 307-313.
- Wright, A.D. and König, G.M. 1996. Antimalarial activity: The search for marine-derived natural products with selective antimalarial activity. *J. Nat. Prod.* 59: 710-716.
- Wright, A.D., Wang, H., Gurrath, M., König, G.M., Kocak, G., Neumann, G., Loria, P., Foley, M. and Tilley, L. 2001. Inhibition of heme detoxification processes underlines the antimalarial activity of terpene isonitrile compounds from marine sponges. *J. Med. Chem.* 44: 873-885.
- Wright, A.D., Goclik, E., König G.M. and Kaminsky, R. 2002. Lepadins D-F: Antiplasmodial and antitrypanosomal decahydroquinoline derivatives from the tropical marine tunicate *Didemnum* sp. *J. Med. Chem.* 45: 3067-3072.
- Wright, C.W. 2002. Antiprotozoal natural products, In Evans, W.C. (ed), *Trease and Evans pharmacognosy*, W.B. Saunders, New York: 407-413.
- Yousaf, M., El Sayed, K.A., Rao, K.V., Lim, C.W., Hu, J.F., Kelly, M., Franzblau, S.G., Zhang, F., Peraud, O., Hill, R.T. and Hamann, M.T. 2002. 12,34-Oxamanzamines, novel biocatalytic and natural products from manzamine producing Indo-Pacific sponges. *Tetrahedron*. 58: 7397-7402.
- Yu, S., Deng, Z., Ofwegen, L., Proksch, P. and Lin, W. 2006. 5,8-Epidioxysterols and related derivatives from a Chinese soft coral *Sinularia flexibilis*. *Steroids*. 71: 955-959.
- Yue, J.M., Chen, S.N., Lin, Z.W. and Sun, H.D. 2001. Sterols from the fungus *Lactarium volemus*. *Phytochemistry*. 56: 801-806.